

IN THE CLAIMS

Please amend the claims as follows:

1. (Previously amended) A powertrain configuration for a fire truck chassis comprising:
 - a chassis comprising at least two frame rails and at least one intermediate cross member;
 - a forward wheel assembly attached to a forward region of the chassis;
 - a rearward wheel assembly attached to a rearward region of the chassis;
 - and
 - an engine positioned adjacent the forward wheel assembly and attached to two chassis frame rails, the engine positioned that, at most, only ten percent of an overall engine height extends above a top of the chassis frame rails.
2. (Original) The powertrain configuration of claim 1, wherein the powertrain further comprises a transmission attached to the engine; and
a driveshaft attached to the transmission.
3. (Original) The powertrain configuration of claim 2, wherein the driveshaft is attached to at least one wheel assembly.
4. (Original) The powertrain configuration of claim 3, wherein a set of drive wheels comprises the forward wheel assembly.
5. (Original) The powertrain configuration of claim 3, wherein a set of drive wheels comprises the rearward wheel assembly.

Response to 11-25-03 Office Action
Serial No. 10/083,904
Page 2

6. (Original) The powertrain configuration of claim 3, wherein the set of drive wheels comprises the forward wheel assembly and the rearward wheel assembly.
7. (Currently amended) A fire truck comprising:
- a chassis frame, comprising at least two chassis frame rails having a forward region and a rearward region, at least one intermediate cross member connecting the chassis frame rails,
 - a forward wheel assembly comprising at least two front wheels, at least one forward axle, and a forward suspension assembly attached to the chassis frame rails, a rearward wheel assembly comprising at least two rearward wheels, at least one rearward axle, and rearward suspension assembly attached to the chassis frame rails; and
 - a powertrain comprising an engine, transmission and driveshaft, the driveshaft mounted to at least one wheel assembly, the powertrain positioned adjacent the front wheel assembly and attached to the chassis frame rails between the front wheel assembly and the rearward wheel assembly and being at a position that an engine top extends no more than 10 percent of an overall engine height above the chassis frame rails;
an engine tunnel attached to the engine and disposed between the chassis frame rails; and

Response to 11-25-03 Office Action
Serial No. 10/083,904
Page 3

a cab attached to a forward region of the chassis frame having an inclined front section, wherein the inclined front section is configured to conform to the dimensions of the engine tunnel.

8. (Previously amended) The fire truck of claim 7, further comprising a cooling system disposed between the chassis frame rails.

9. (Currently amended) ~~The fire truck of claim 8, wherein the cooling system comprises:~~ A fire truck comprising:

a chassis frame, comprising at least two chassis frame rails having a forward region and a rearward region, at least one intermediate cross member connecting the chassis frame rails;

a forward wheel assembly comprising at least two front wheels, at least one forward axle, and a forward suspension assembly attached to the chassis frame rails, a rearward wheel assembly comprising at least two rearward wheels, at least one rearward axle, and rearward suspension assembly attached to the chassis frame rails;

a powertrain comprising an engine, transmission and driveshaft, the driveshaft mounted to at least one wheel assembly, the powertrain positioned adjacent the front wheel assembly and attached to the chassis frame rails between the front wheel assembly and the rearward wheel assembly and being at a position that an engine top extends no more than 10 percent of an overall engine height above the chassis frame rails;

a cooling system disposed between the chassis frame rails, the cooling

Response to 11-25-03 Office Action
Serial No. 10/083,904
Page 4

system comprising

a heat exchanger;

a fan;

an engine tunnel configured to extend no more than ~~24 inches~~ (61 cm) in height above the chassis frame rail at a highest point and extending no more than ~~36 inches~~ (97 cm) in length, the engine tunnel width defined by a dimension separating the chassis frame rails; and

a coolant flow path connecting the engine and the heat exchanger.

10. (Previously amended) The truck of claim 9, wherein the heat exchanger is disposed at a forward end of the engine tunnel.
11. (Previously amended) The fire truck of claim 9, wherein the heat exchanger is disposed at the rear of the engine tunnel.
12. (Previously amended) The fire truck of claim 9, wherein the fan is a mechanical fan.
13. (Previously amended) The fire truck of claim 9, wherein the fan is a hydrostatic fan.
14. (Previously withdrawn)
15. (Previously withdrawn)
16. (Previously withdrawn)
17. (Previously withdrawn)
18. (Previously amended) The fire truck of claim 7, wherein the cooling system is mounted outside of the chassis frame rails.

Response to 11-25-03 Office Action
Serial No. 10/083,904
Page 5

19. (Previously amended) The fire truck of claim 9 further comprising a cab attached to and above a forward region of the chassis frame comprising a cab floor and a cab floor inclined front section, the cab floor inclined front section configured to conform to the dimensions of the engine tunnel.
20. (Previously amended) The fire truck of claim 7, wherein the placement of the powertrain between the chassis frame rails does not raise the vehicle's center of gravity and an engine bottom ground clearance is not lowered to unsafe levels.
21. (Currently amended) A truck comprising:
- a chassis frame, comprising at least two chassis frame rails having a forward region and a rearward region, at least one intermediate cross member connecting the chassis frame rails;
 - a forward wheel assembly comprising at least two front wheels, at least one forward axle, and a forward suspension assembly attached to the chassis frame rails;
 - a rearward wheel assembly comprising at least two rearward wheels, at least one rearward axle, and a rearward suspension assembly attached to the chassis frame rails;
 - a powertrain comprising an engine, transmission and driveshaft, the driveshaft mounted to at least one wheel assembly, the powertrain positioned and attached to the chassis frame rails between the front wheel assembly and the rearward wheel assembly and being at a position that an engine top extends

Response to 11-25-03 Office Action
Serial No. 10/083,904
Page 6

no more than 10 percent of an overall engine height above the chassis frame rails; and

a cooling system disposed between the chassis frame rails, the cooling system including

a heat exchanger;

a fan;

an engine tunnel configured to extend no more than ~~24 inches~~ (61 cm) in height above the chassis frame rail at a highest point and extending no more than ~~38 inches~~ (97 cm) in length, the engine tunnel width defined by a dimension separating the chassis frame rails; and

a coolant flow path connecting the engine and the heat exchanger.

22. (Previously added) The truck chassis of claim 21, wherein the heat exchanger is disposed at a forward end of the engine tunnel.
23. (Previously added) The truck chassis of claim 21, wherein the heat exchanger is disposed at the rear of the engine tunnel.
24. (Previously added) The truck chassis of claim 21, further comprising a cab attached to and above a forward region of the chassis frame comprising a cab floor and a cab floor inclined front section, the cab floor inclined front section configured to conform to the dimensions of the engine tunnel.

Response to 11-25-03 Office Action
Serial No. 10/083,904
Page 7